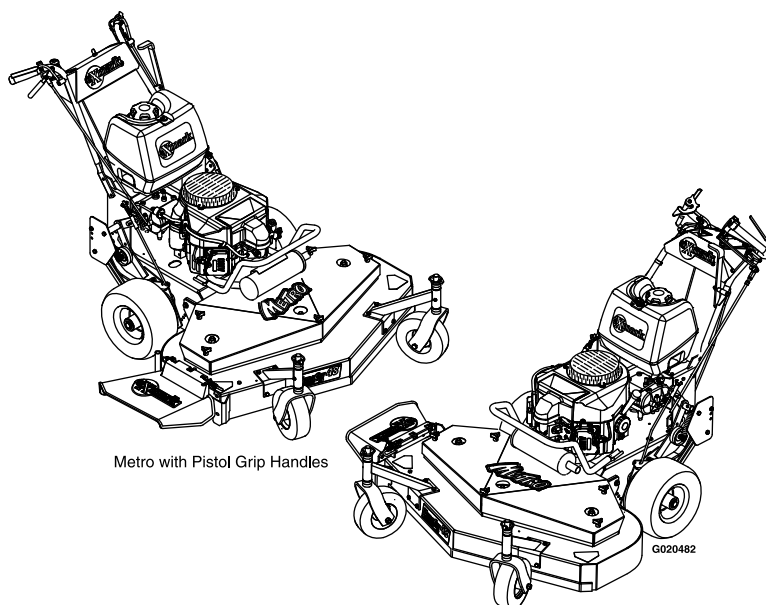




METRO®

Model No. MG481KA322P—Serial No. 314000000 and Up

Picture below may not reflect actual product.



Parts Manual

Ordering Replacement Parts

To order replacement parts, please supply the part number, the quantity, and the description of each part desired.

Understanding Reference Numbers

Each identified part in an illustration has a reference number. The reference number for a part also appears in the parts list, along with other information about the part.

This catalog uses two special reference number formats, one to indicate parts in a service assembly and another to indicate the quantity of a given part in an illustration.

Service Assembly Reference Numbers

Parts in service assemblies have reference numbers in the form a:b. The a represents the reference number of the entire service assembly and the b represents a sequential number unique to each part within the service assembly.

For example, a wheel assembly might be identified by reference number 6, the tire by 6:1, the valve by 6:2, and the wheel by 6:3. When you order the assembly identified by reference number 6, you receive all parts identified by reference numbers 6:1, 6:2, and 6:3. However, you may also order any part individually. Reference numbers of this type appear in illustration and in parts lists.

Reference Numbers Indicating Quantity

In an illustration, if a reference number indicates more than one part, the reference number has the form nX y. The n represents the quantity of the part, the X is the multiplication symbol, and the y represents the reference number.

For example, in an illustration, the reference number 2X 37 means that two of the parts identified by reference number 37 are indicated.

List of Abbreviations

AR: as required	HJ: hex jam	PRH: phillips round head
ASM: assembly	HLH: hex lag head	PTH: phillips truss head
BBC: blade brake control	HOC: height-of-cut	PTO: power-take-off
BHTF: button head thread forming	HSBH: hex socket button head	RH: right hand
CARR: carriage	HSFH: hex socket flat head	ROPS: roll-over protection system
CCW: counter clockwise	HSH: hex socket head	RRB: rear roller brush
CW: clockwise	HWH: hex washer head	SFH: slotted fillister head
DEG: degrees	HWHTF: hex washer head thread forming	SHH: slotted hex head
DPA: Dual Point Adjustment	HYD: hydraulic	SHWH: slotted hex washer head
ECM: electronic control module	LH: left hand	SPH: slotted pan head
EXT: external	LP: Liquefied Petroleum Gas	SQH: square head
FH: flat head	LPG: Liquefied Petroleum Gas	SRH: slotted round head
GA: gauge	NI: nylon insert	STD: standard
HD: heavy-duty	NPTF: national pipe thread fine	TAP: self tapping
HF: hex flange	PFH: phillips flat head	TTH: torx truss head
HH: hex head	PPH: phillips pan head	
HHF: hex head flange	PPHTF: phillips pan head thread forming	
HHFTF: hex head flange thread forming		

Touch Up Paint

Exmark black touch up spray paint – gloss black.

Exmark red touch up paint (spray paint – P/N 1-850337 - .6 oz liquid bottle – P/N 103-9140).

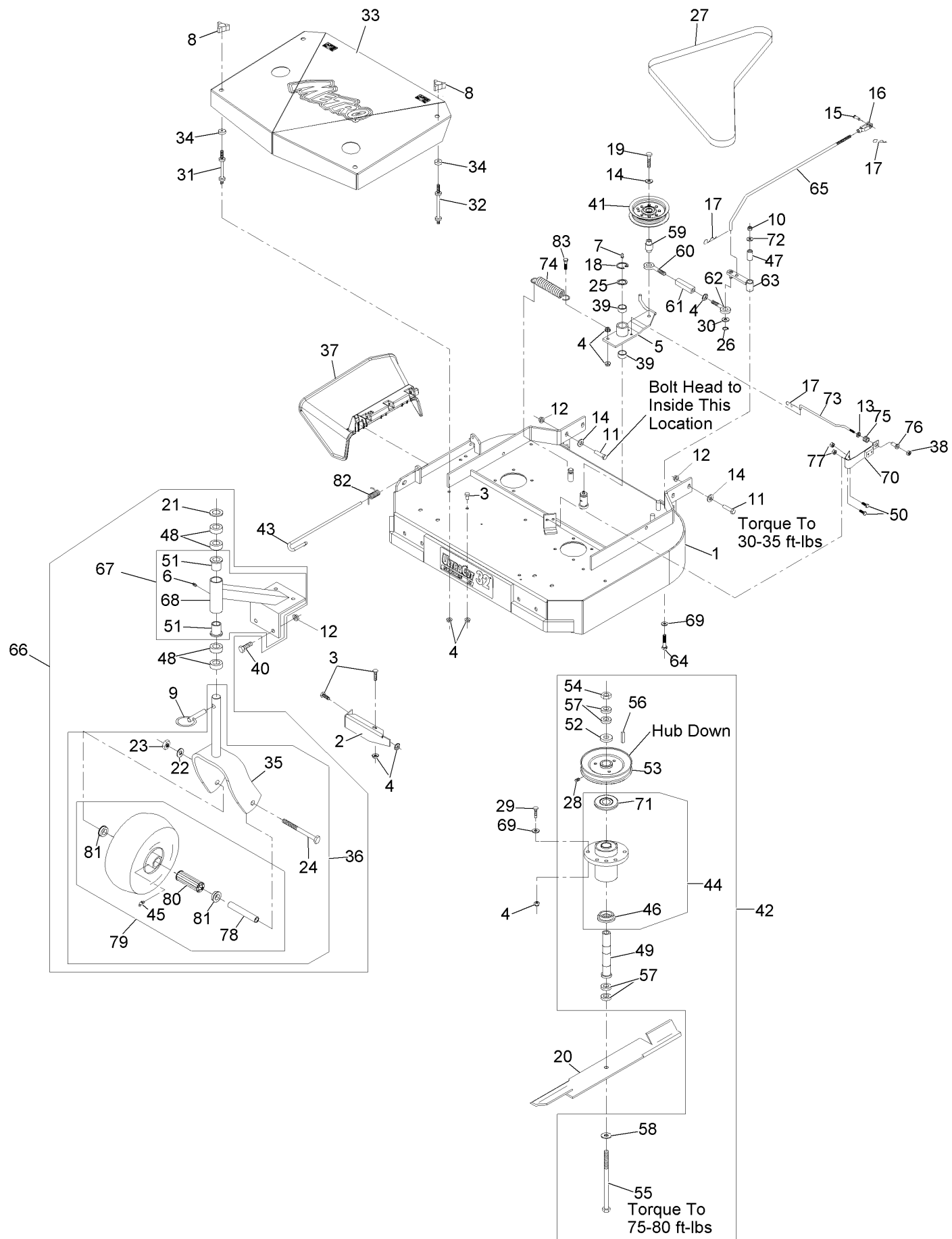


If your Exmark dealer does not have the Exmark part in stock, Exmark will get the parts to the dealer the next business day or the part will be FREE Guaranteed!! (Some restrictions apply. See your participating Exmark Dealer for details.)

Contents

Mower Deck Assembly	4
Engine Deck Assembly	6
Engine Deck Assembly (cont.)	8
Pistol Grip Upper Handle and Controls	10
Fuel Tank Assembly	12
Decals	13

Mower Deck Assembly



Mower Deck Assembly (continued)

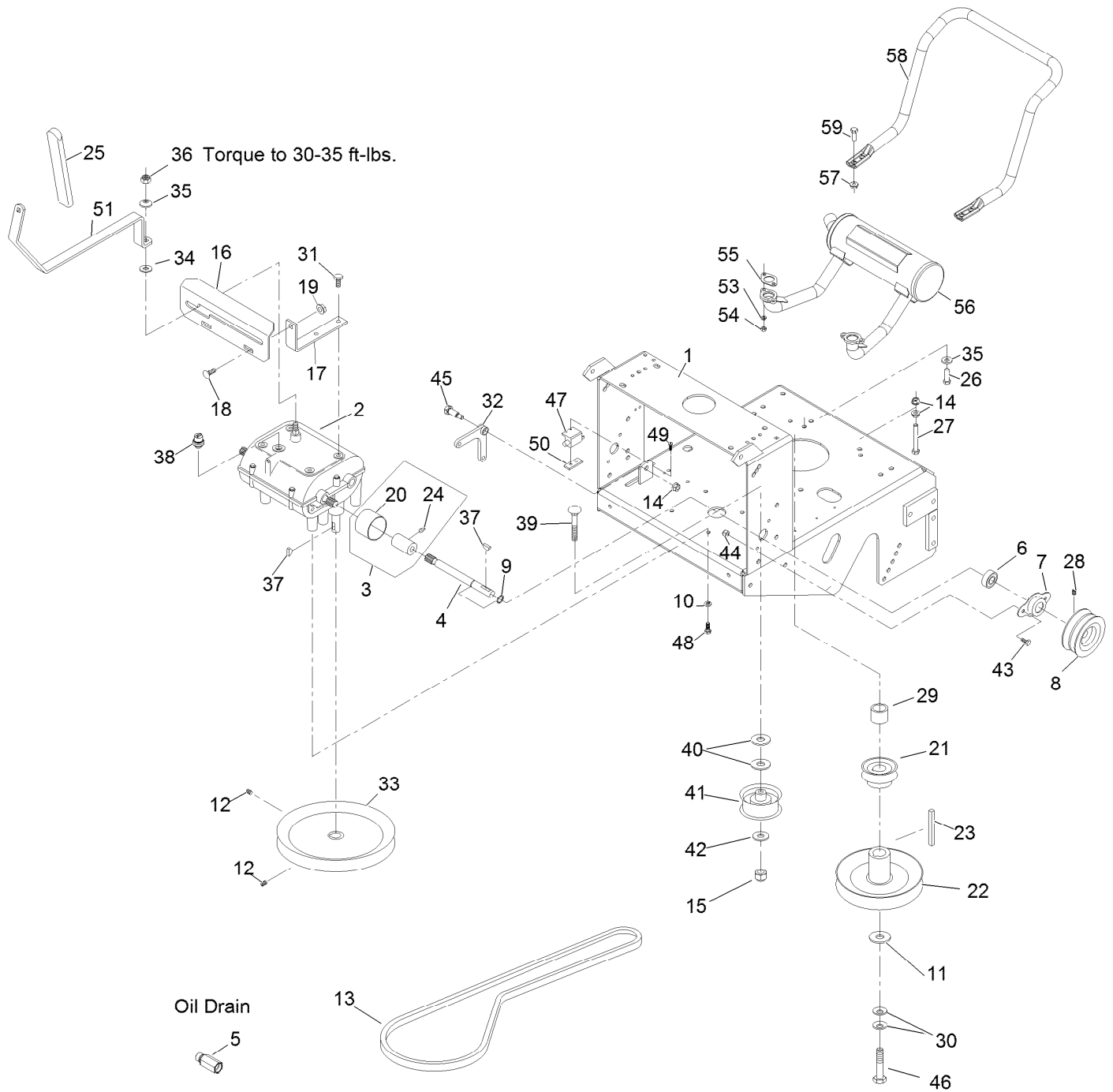
Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
1	103-2313	1	Deck (116-0618-01) W/Decals And Dogleg (32")	42	103-8387	2	Asm, Cutter Housing Complete
2	116-1730-01	1	Baffle-Dogleg	43	109-8854	1	Pin-Chute
3	322-2	7	Screw-HH 5/16-18 X 5/8	44	103-8280	2	Asm, Cutter Housing W/Bearings ▲
4	32128-20	22	Nut-Whizlock 5/16-18	45	302-61	2	Zerk-45° 1/4-28
5	103-3600	1	Idler Arm ASM	46	103-2535	2	Spacer-Guard Bottom
6	302-52	2	Zerk-1/8-27 Str	47	1-403179	1	Tube-Pivot
7	302-19	1	Zerk-1/4-28 Str	48	1-303314	8	Spacer-Caster
8	1-323385	4	Knob-3 Prong	49	1-323529	2	Tube-Spindle, Short ▲
9	1-809020	2	Pin	50	321-4	2	Screw-HH 1/4-20 X 3/4
10	3296-29	1	Nut-Nyloc 5/16-18	51	1-303514	4	Bearing-Flanged
11	323-8	8	Screw-HH 3/8-16 X 1 1/2	52	1-323339	2	Washer
12	3290-357	16	Nut-Whizlock 3/8-16	53	1-403183	2	Sheave
13	1-323748	1	Ring-Push On	54	3219-6	2	Nut-Hex 5/8-18
14	98-5975	9	Washer-Spring Disc 3/8	55	1-800861	2	Screw-Cap, HH
15	1-808280	1	Pin-Clevis 5/16 X 1 49/64	56	1-807267	2	Key-Machine 1/4 X 3/16 X 1 1/4
16	1-303105	1	Yoke-Adjustable	57	1-323539	8	Spacer-Blade Drive
17	1-806003	3	Hairpin-Cotter	58	1-513208	2	Washer-Spring Disc 5/8
18	32151-103	1	E-Ring	59	1-303434	1	Bushing-Engagement
19	702809	1	Screw-HH	60	1-303348	1	Eyebolt-Thread, LH
20	103-6583	2	Blade, 16.25 Notched	61	1-303236	1	Body-Turnbuckle
20	103-6581	2	Blade, 16.25 Mulching ■	62	1-303238	1	Eyebolt-Thread, RH
20	103-6738	2	Blade, Low Lift	63	1-322235	1	Arm-Assist
20	103-1577	2	Blade, 16.25 Solid	64	322-10	1	Screw-HH 5/16-18 X 2
20	116-5178	2	Blade, Extreme	65	1-323303	1	Arm-Assist, Linkage
21	1-513338	2	Washer	66	103-1238	2	Caster/Mount, Complete
22	3253-7	2	Washer-Lock 1/2	67	1-302203	2	Support ASM
23	3217-9	2	Nut-Hex 1/2-13	68	1-302194-01	2	Support-Caster
24	325-20	2	Screw-HH 1/2-13 X 6	69	1-303334	9	Washer-Spring Disc 5/16
25	1-303352	1	Washer-Spindle	70	1-324372	1	Pad And Spring ASM
26	32120-35	1	E-Ring	71	103-1330	2	Guard-Bearing Top ▲
27	1-323734	1	Drive Belt, (To Blades)	72	3256-3	1	Washer-5/16 Std
28	3246-18	2	Setscrew-5/16-18 X 3/8 ●	73	1-323718	1	Rod-Brake
29	322-6	9	Screw-HH 5/16-18 X 1 1/4	74	1-323071	1	Spring-Extension
30	3256-23	1	Washer-5/16 Sae	75	1-323747	1	Spring-Compression
31	1-303537	2	Stud-Shield, Belt (Short)	76	1-323746	1	Spacer-Flanged
32	1-303536	2	Stud-Shield, Belt (Long)	77	3296-42	2	Nut-Nyloc 1/4-20
33	116-2705	1	Shield (1-322149-01) W/Decals	78	1-513547	2	Spacer
34	1-323417	4	Washer-Belt Shield	79	103-2171	2	Kit,Semi-Pneumatic Wheel Replacement
35	116-7942-01	2	Fork-Caster	80	1-513809	1	Bearing
36	103-1236	2	Caster Wheel Assembly	81	1-513810	4	Bushing-Flanged
37	109-5151	1	Deflector-Discharge	82	116-0962	1	Spring, Torsion
38	3296-56	1	Nut-Nyloc 1/4-20 Thin	83	116-3515	1	Screw,HH Special 5/16-18 X 1.25
39	1-323729	2	Sleeve-Bearing				
40	323-4	8	Screw-HH 3/8-16 X 3/4				
41	116-3626	1	Pulley-Idler				

● Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on threads.

■ Requires installation of mulch kit for proper mulching. See your Exmark dealer for details.

▲ Apply Mobil HTS grease (P/N 103-5217 1.5 oz packet) (or a food-grade anti-seize). See operator s manual for locations.

Engine Deck Assembly



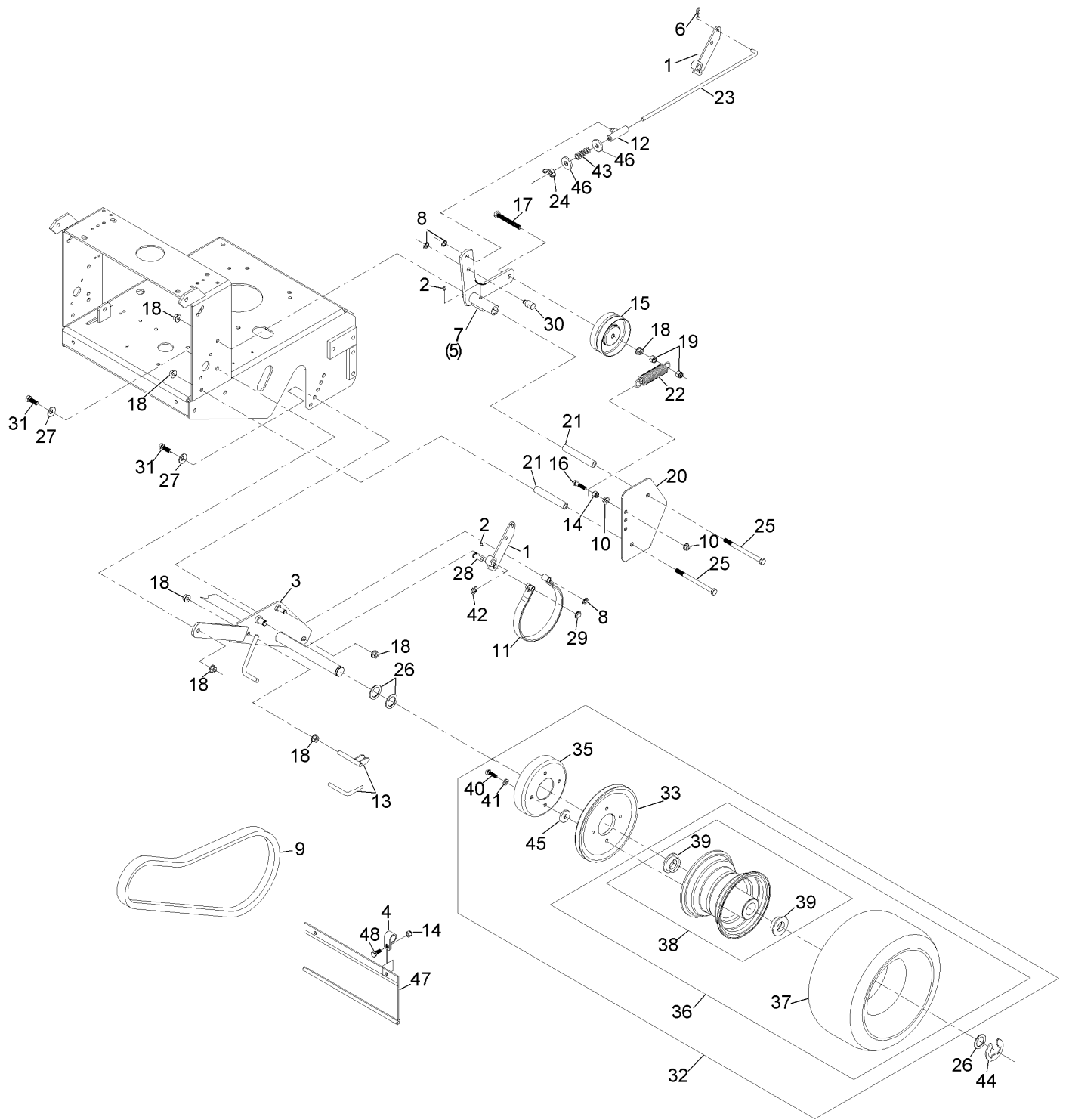
Engine Deck Assembly (continued)

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	116-6131	1	Rear Deck (116-6084-01) W/Decals	29	1-633453	1	Spacer-Clutch
2	1-323500	1	Transmission	30	1-603610	2	Washer-Spring Disc 7/16
3	1-324340	2	Coupling, W/Guard And Zerk	31	32144-11	4	Screw-HWH 5/16-18 X 3/4 Tf
4	1-323502	2	Shaft-Transmission	32	1-303186	1	Bellcrank
5	103-2587	1	Adapter	33	1-323278	1	Sheave-Transmission ●
6	1-323252	2	Bearing-Shaft ●	34	1-323379	1	Washer
7	1-323254	2	Flange-Output	35	98-5975	5	Washer-Spring Disc 3/8
8	103-6512	2	Sheave-Transmission ●	36	3296-6	1	Nut-Nyloc 3/8-24
9	32151-62	2	Ring-Retaining	37	3257-5	3	Key-Woodruff #9 3/4 X 3/16
10	1-805005	4	Washer-Lock 5/16 Heavy	38	1-303282	1	Switch-Start, Neutral
11	1-373034	1	Washer	39	3231-6	1	Bolt-Carriage 3/8-16 X 2
12	3245-41	2	Setscrew-1/4-20 X 3/8 ■	40	3256-5	2	Washer-7/16 Std
13	1-323280	1	Belt, Transmission Drive	41	1-323285	1	Pulley-Idler, Flat
14	3290-357	3	Nut-Whizlock 3/8-16	42	3256-24	1	Washer-3/8 Sae
15	3296-39	1	Nut-Nyloc 3/8-16	43	321-3	4	Screw-HH 1/4-20 X 5/8
16	103-3498	1	Asm, Shifter Plate (1-323387-03) W/ Decals	44	3296-42	4	Nut-Nyloc 1/4-20
17	1-323389-03	2	Bracket-Plate, Shift	45	1-603403	1	Bolt-Shoulder
18	3230-1	2	Bolt-Carriage 5/16-18 X 3/4	46	116-3702	1	Screw-HH ■
19	104-8300	2	Nut-Nyloc 5/16-18 Flg	47	1-513051	1	Switch-N.O.
20	51-4220	2	Guard-Coupler	48	322-3	4	Screw-HH 5/16-18 X 3/4
21	103-1666	1	Sheave-Transmission ●	49	3290-500	2	Screw-PPH #10-24 X 5/8
22	103-1667	1	Sheave ●	50	1-633181	1	Plate-Tapped
23	103-4177	1	Key	51	103-1606	1	Lever, Shift W/Grip
24	302-19	2	Zerk-1/4-28 Str	53	114-3550	4	Washer-Lock, Spring
25	103-1733	1	Grip Foam	54	114-3549	4	Nut-M8
26	323-7	4	Screw-HH 3/8-16 X 1 1/4	55	1-653313	2	Gasket-Exhaust
27	323-13	1	Screw-HH 3/8-16 X 2 3/4	56	116-3734	1	Muffler-Horizontal, Offset
28	3246-18	2	Setscrew-5/16-18 X 3/8 ■	57	104-8301	4	Nut-Nyloc 3/8-16 Flg
				58	116-6278-03	1	Guard-Muffler
				59	323-6	4	Screw-HH 3/8-16 X 1

● Apply anti-seize compound in bore.

■ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on threads.

Engine Deck Assembly (cont.)

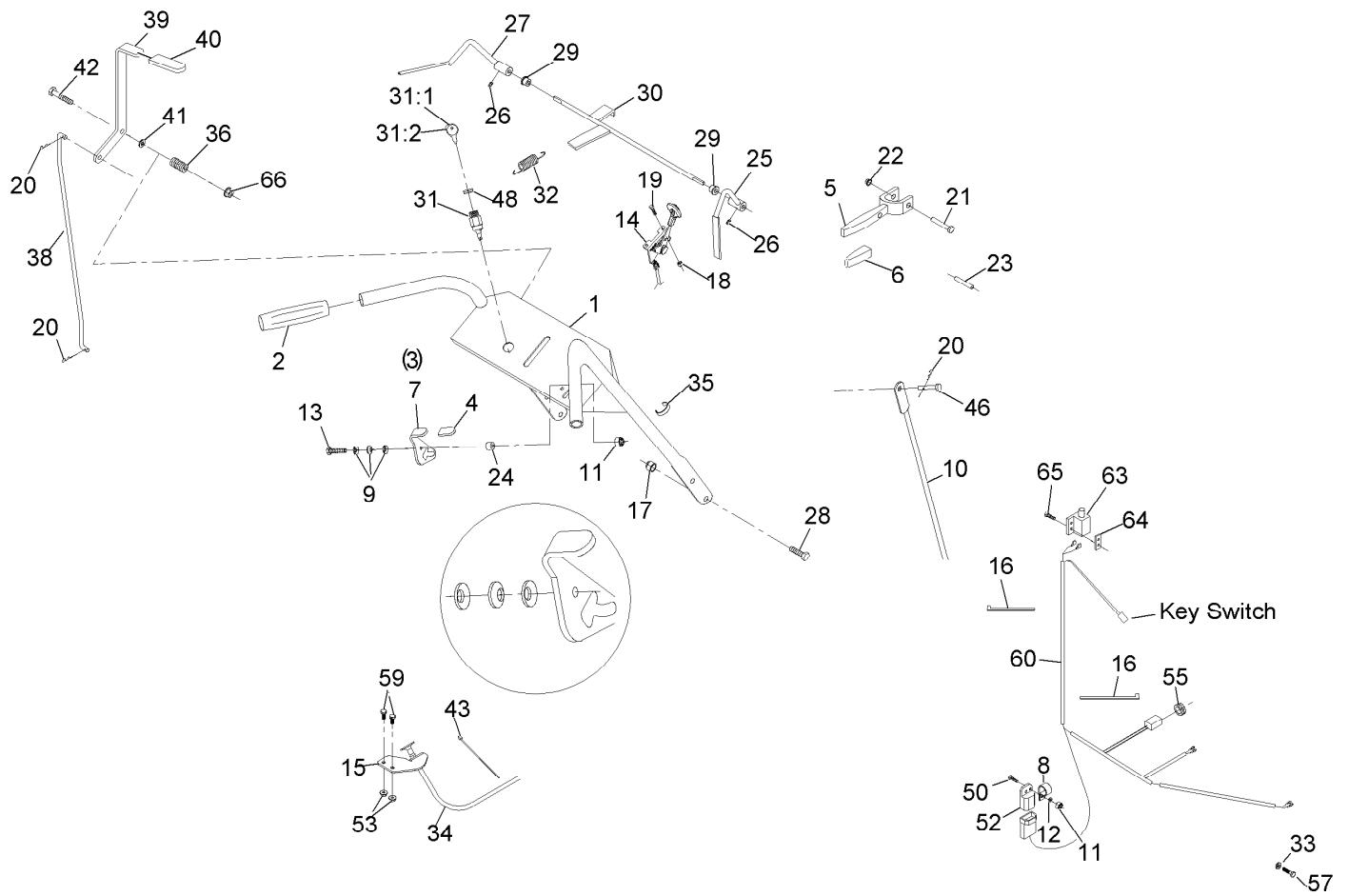


Engine Deck Assembly (cont.) (continued)

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	103-1611-03	2	Arm-Brake	25	323-39	4	Screw-HH 3/8-16 X 5
2	302-19	4	Zerk-1/4-28 Str	26	1-523157	1	Washer ●
3	1-322141-03	1	Axle	26	1-543436	1	Washer-Spacer ●
4	2412-104	2	Clamp-R	27	98-5975	4	Washer-Spring Disc 3/8
5	116-7542-03	1	Arm-Idler, LH	28	1-323307	2	Pin-Clevis 1/2 X 1
6	1-806003	2	Hairpin-Cotter	29	1-803051	2	Nut-Push 3/8
7	116-7543-03	1	Arm-Idler, RH	30	103-1864	2	Swivel-Lever, Drive
8	32151-47	6	Ring-Retaining	31	323-6	4	Screw-HH 3/8-16 X 1
9	1-323344	2	Belt-Wheel, Drive	32	1-324193	2	Drive Wheel
10	32128-20	4	Nut-Whizlock 5/16-18	33	1-323349	2	Sheave-Wheel, Drive
11	1-323262	2	Band-Brake	35	1-323261	2	Drum-Brake
12	110-5866	2	Swivel-Brake	36	1-323346	2	Wheel And Tire ASM
13	1-603430	2	Scraper	37	1-323361	1	Tire
14	3296-29	4	Nut-Nyloc 5/16-18	38	1-323360	1	Wheel And Hub ASM
15	1-323352	2	Idler-Wheel, Drive	39	1-323329	4	Bearing-Flanged
16	322-6	2	Screw-HH 5/16-18 X 1 1/4	40	322-5	8	Screw-HH 5/16-18 X 1
17	99-8664	2	Bolt-HH 3/8-16 X 3 Tap	41	1-805005	8	Washer-Lock 5/16 Heavy
18	3290-357	14	Nut-Whizlock 3/8-16	42	32120-47	2	Ring-Retaining
19	3296-39	4	Nut-Nyloc 3/8-16	43	1-323245	2	Spring-Compression
20	1-323287-01	2	Shield-Wheel, Drive	44	1-808519	2	Ring-Snap
21	1-323283	4	Spacer-Shield	45	1-373034	8	Washer
22	1-603402	2	Spring-Extension	46	3256-23	4	Washer-5/16 Sae
23	1-323548	2	Linkage-Brake	47	98-3259	1	Shield-Trailing
24	1-513959	2	Wingnut-Nyloc 5/16	48	322-3	2	Screw-HH 5/16-18 X 3/4

● QTY As Required

Pistol Grip Upper Handle and Controls



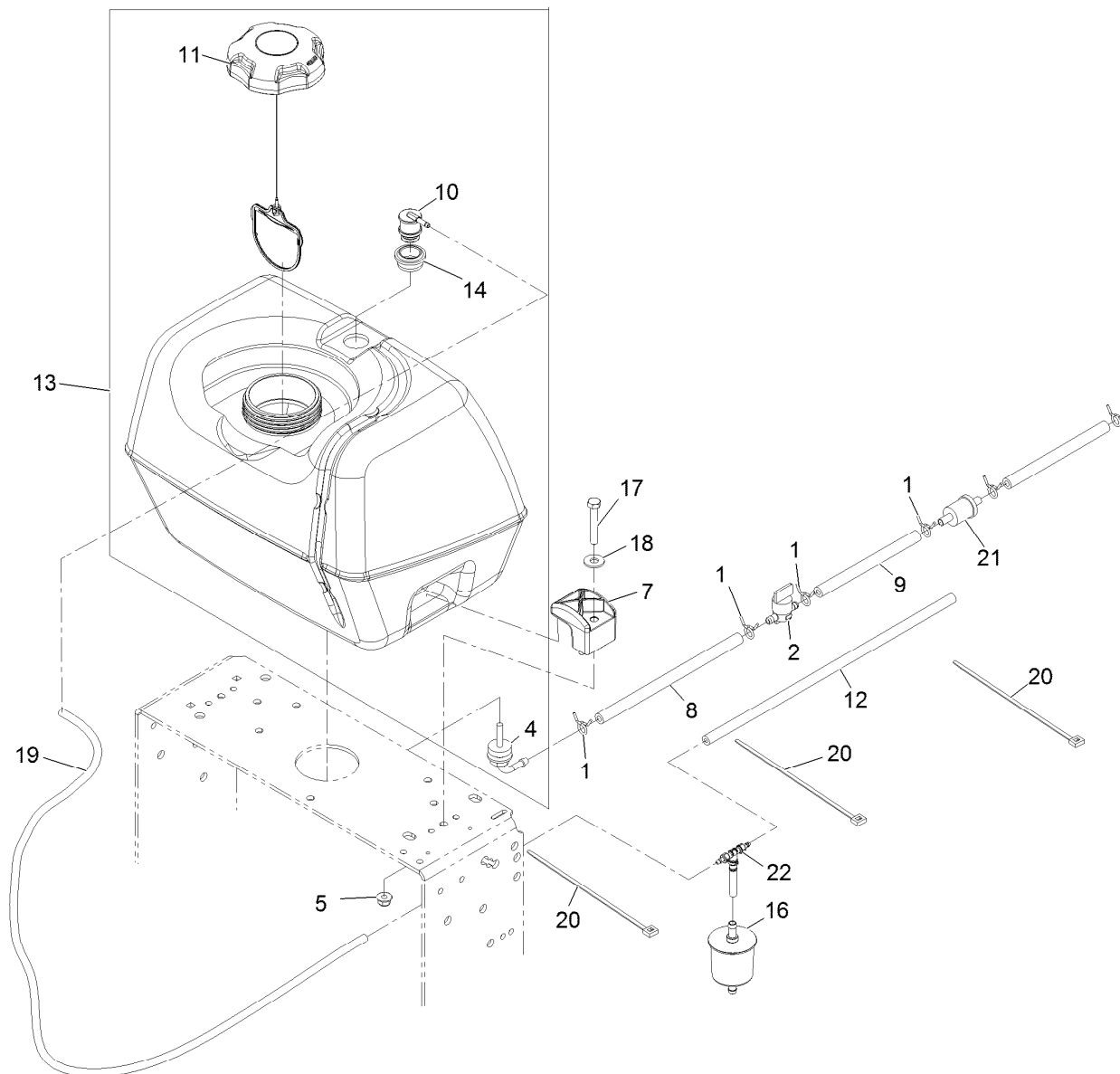
Pistol Grip Upper Handle and Controls (continued)

<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>	<i>Ref.</i>	<i>Part Number</i>	<i>Qty.</i>	<i>Description</i>
1	109-4695	1	Kit, Handle (109-4682-03) W/Decals	29	1-303365	2	Bushing-Nylon
2	1-303097	2	Grip-Handle	30	1-322192-03	1	Rod Weldmt, Opc
3	1-324279	1	LH Thumb Latch ASM ●	31	1-403121	1	Switch-Key
4	1-303019	2	Grip-Latch	31:1	1-603511	1	Key-Ignition
5	1-302006	2	Drive Lever ASM	31:2	103-2106	1	Key-Exmark Logo
6	1-303021	2	Grip-Lever, Drive	32	1-303363	1	Spring-Extension
7	1-324280	1	RH Thumb Latch ASM	33	33094-00	1	Washer
8	1-323229	1	Clip-Loom 3/8	34	103-1796	1	Cable-Choke
9	1-303435	6	Washer-Spring Disc 1/4	35	1-303088	1	Clip-Cable
10	1-323359	2	Linkage-Wheel, Drive	36	1-303160	1	Spring-Compression
11	3296-42	3	Nut-Nyloc 1/4-20	38	1-323298	1	Linkage-Blade, Upper
12	3256-22	1	Washer-1/4 Sae	39	116-6331	1	Lever ASM
13	321-18	2	Screw-HH 1/4-20 X 2 1/4	40	1-303020	1	Grip-Lever
14	116-2426	1	Cable, Throttle	41	3256-4	1	Washer-3/8 Std
15	103-1797-01	1	Bracket-Cable, Choke	42	323-10	1	Screw-HH 3/8-16 X 2
16	1-303287	5	Tie-Cable 5 1/2 (Small)	43	1-303335	1	Tie-Cable 7 15/16 (Large)
17	3296-39	4	Nut-Nyloc 3/8-16	46	1-808286	2	Pin-Clevis
18	3296-2	2	Nut-Nyloc #10-24	48	103-0498	1	Nut-Ignition
19	1-807513	2	Bolt-Carriage #10-24 X 1/2	50	321-4	1	Screw-HH 1/4-20 X 3/4
20	1-806003	4	Hairpin-Cotter	52	1-323430	1	Module-Interlock
21	1-808250	2	Pin-Lever, Drive	53	32128-33	2	Nut-Whizlock 1/4-20
22	1-803001	2	Nut	55	1-543296	1	Grommet
23	1-806340	2	Pin-Roll	57	33114-016	1	Screw-HH M8-1.25 X 16Mm
24	1-323549	2	Spacer	59	321-3	2	Screw-HH 1/4-20 X 5/8
25	1-412185-03	1	Lever-RH ▲	60	116-2661	1	Harness-Wire
26	1-803322	2	Setscrew-5/16-24 X 5/16 ■	63	1-513051	1	Switch-N.O.
27	1-412183-03	1	Lever-LH ▲	64	1-633181	1	Plate-Tapped
28	323-6	4	Screw-HH 3/8-16 X 1	65	3290-500	2	Screw-PPH #10-24 X 5/8
				66	104-8301	1	Nut-Nyloc 3/8-16 Flg

● Not illustrated

■ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on threads.

▲ Use Pro-Lock retaining type, Part no. 1-840023 (.5cc tube) on inside of bore of OPC hub.



Fuel Tank Assembly

Ref.	Part Number	Qty.	Description
1	2412-98	4	Clamp-Hose
2	1-603770	1	Valve-Fuel
4	103-2605	1	Fitting-Fuel Bulkhead W/Strainer ▲
5	104-8300	2	Nut-Nyloc 5/16-18 Flg
7	107-4543	2	Clamp
8	109-0650	1	Hose-Fuel
9	99-9415	1	Hose-Fuel
10	119-3547	1	Valve-Vent, Fuel
11	120-5461	1	Cap-Fuel, Ratcheting
12	115-7872	1	Hose-Fuel

Ref.	Part Number	Qty.	Description
13	126-1525	1	Asm-Fuel Tank
14	114-0284	1	Grommet
16	120-2235	1	Filter-Fuel
17	322-10	2	Screw-HH 5/16-18 X 2
18	3256-3	2	Washer-5/16 Std
19	116-4346	1	Hose-Emissions
20	1-303335	3	Tie-Cable 7 15/16 (Large)
21		1	Pn 41019-1055 Filter W/6In Fuel Line ■●
22	116-5464	1	Tee And Check

● Not serviced separately

▲ Use Pro-Lock, Nut Type (P/N 1-840022, .5ml tube) on threads.

■ Obtain parts from www.kawpowerepc.com



Decals

Ref.	Part Number	Qty.	Description	Ref.	Part Number	Qty.	Description
2	103-1798	1	Decal, Throttle	13	1-303518	1	Decal, Shifter
3	103-2882	1	Decal, Exmark Logo	14	1-323550	2	Decal, Neutral/P.Brake
4	117-2718	1	Decal-Arrester, Spark	15	116-4769	1	Decal-Filter, Emissions
5	103-2076	2	Decal-Caution	16	103-2920	1	Decal, Metro Model
6	1-323427	1	Decal, Belt Routing (36" Deck)	17	1-303508	1	Decal-Warning, Discharge
8	116-4846	1	Decal-Ultracut 32 Series 2	18	1-403005	1	Decal-Danger
11	98-5954	1	Decal-Cover, Missing	19	1-303517	1	Decal,Belt Drive
12	103-1967	1	Decal, Console (15 Hp Kaw)	20	1-403143	1	Decal, Sulky Warning
				99	103-2640	1	Decal, Kit ●

● Not illustrated

Notes:

MAXIMIZE THE PERFORMANCE OF YOUR EXMARK.

4-CYCLE PREMIUM ENGINE OIL

Part No. 116-3373

Both SAE 30 and SAE 10W-30 in one bottle.

Contains increased levels of zinc and phosphorus for better lubricity.

No Viscosity Index Improvers that tend to shear down in high heat.

Synthetic formulation.

Gas & Diesel compatible.

Anti-corrosion additives.

API 'SL' and JASO rated with wet clutch compatibility for other machines.

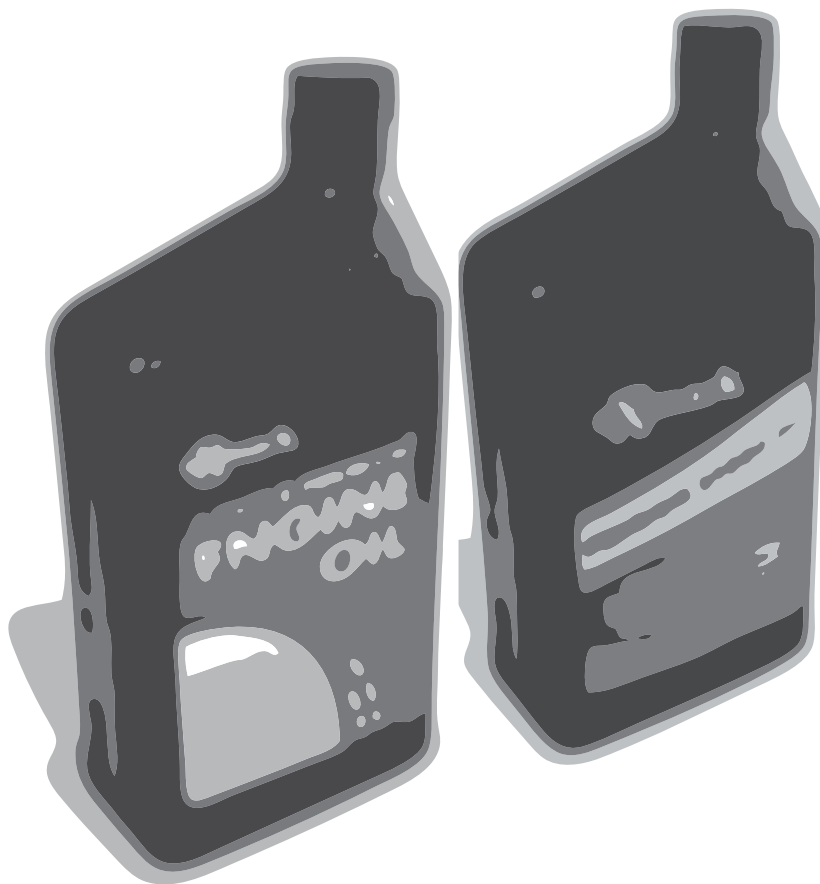
PREMIUM HYDRO OIL

Part No. 109-9828

Commercial quality for tough, high-heat conditions.

Designed specifically for zero-turn mower hydraulic systems.

Superior shear resistance under heavy loads.



Available from your local Exmark dealer. Find your closest dealer at exmark.com

EXMARK ACCESSORIES AND OPTIONS*

MID-MOUNT RIDING ACCESSORIES AND OPTIONS

CUSTOM RIDE SEAT SUSPENSION SYSTEM	OPERATOR CONTROLLED DISCHARGE
FULL SUSPENSION SEAT	SUN SHADE
DECK LIFT ASSIST KIT	TRASH CONTAINER
HITCH KIT	TURF STRIPER
LIGHT KIT	ULTRA VAC COLLECTION SYSTEM
12V POWER PORT	ULTRA VAC QUICK DISPOSAL SYSTEM
MICRO-MULCH SYSTEM	

OUT-FRONT RIDING ACCESSORIES AND OPTIONS

CUSTOM RIDE SEAT SUSPENSION SYSTEM	SNOW BLADE
DUAL-TAIL WHEEL	SNOWBLOWER
FLOOR PAN EXTENDER	SUN SHADE
HITCH KIT	TRASH CONTAINER
LIGHT KIT	ULTRA VAC COLLECTION SYSTEM
MICRO-MULCH SYSTEM	ULTRA VAC QUICK DISPOSAL SYSTEM
ROLL OVER PROTECTION SYSTEM (ROPS)	WEATHER CAB

WALK-BEHIND ACCESSORIES AND OPTIONS

GRASS CATCHER	TURF STRIPER
MICRO-MULCH SYSTEM	STANDON

*Some accessories and options not available for some models.

Place Model No. and Serial No.
Label Here (Included in the Literature
Pack) or Fill in Below

Model No. _____

Serial No. _____

Date Purchased _____

Engine Model No. and Spec. No. _____

Engine Serial No. (E/No) _____

© 2013 Exmark Mfg. Co., Inc.
Industrial Park Box 808
Beatrice, NE 68310
All Rights Reserved

Part No. 4501-693 Rev. A
(402) 223-6300
Fax (402) 223-5489
Printed in the USA.



www.exmark.com